



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,725	04/21/2004	Jack Chen	M407	4777
36406 7590 02/13/2009				
ROBERT L. MARSH				
54 DANADA DRIVE				
P.O. BOX 4468				
WHEATON, IL 60189-4468				
EXAMINER				
AN, IG TAI				
ART UNIT		PAPER NUMBER		
3687				
MAIL DATE		DELIVERY MODE		
02/13/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/828,725

Applicant(s)

CHEN, JACK

Examiner

Ig T. An

Art Unit

3687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The Amendment filed on 20 November 2008 has been acknowledged. Claims 1 – 2, 5 – 6, 8 – 9 are amended. Claim 4 is cancelled. Claims 10 – 13 are newly presented. Therefore, Claims 1 – 3 and 5 – 13 are pending and considered as set forth.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1, 6, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Massaro (US 20020034067) in view of Munn et al. (Hereinafter Munn) (US 20030156090).**

As per Claim 1, Massaro teaches a device for electronically pricing product above a shelf (Title and Abstract) comprising:

a bus, said bus including a rearward panel, a forward panel, a spacing between portions of said rearward and said forward panels forming a cavity therebetween and having a plurality of contact strips extending between said rearward panel and said forward panel (Abstract and Figure 1 and 2 teaches a bus including a rearward panel, a forward panel, a spacing between portions of said rearward and said forward panels forming a cavity therebetween and having a plurality of contact strips extending between said rearward panel and said forward panel),

said bus attachable to said shelf (Abstract, Figure 1, Figure 6 and Figure 9 teaches bus are attached to the bus);

a price display unit having a forward panel for electronically displaying a product price (Abstract and Figure 6 teaches a price display unit for electronically displaying a product price),

said rearward member having contacts for making electric connection to said contact strips (Figure 1 and Figure 2, Figure 9 – 14 and Paragraph 50 – 51 teaches a display unit is attached to the print circuit board which have direct electric connection to contact strips for power and data);

a control unit for storing pricing information (Figure 9, Abstract and Paragraph 27 - 28 and 32 teaches print circuit board and B.U.S.M stores display information such as price), and

said control unit electrically connected to said contact strips of said bus wherein said price display unit receives electric power and a display signal from said control unit

through said contact strips of said bus (Abstract, Figure 9, and paragraph 27 – 28 and 61 – 62 teaches B.U.S.M and print circuit board is electronically connected on the bus and B.U.S.M send the display information to a display unit, which is attached to the print circuit board, through contact strip of the bus).

However, Massaro is silent regarding said bus having a downwardly directed opening communicating with said cavity; said price display unit including an upwardly directed rearward member joined to a bottom of said forward panel, and said rearward member removably receivable into said downwardly directed opening for removably attaching said price display unit to said bus.

Munn discloses bistable liquid crystal display having a remote display update control having said bus having a downwardly directed opening communicating with said cavity (Figure 6 – 10D teaches bus is directed downward opening with cavity);

said price display unit including an upwardly directed rearward member joined to a bottom of said forward panel (Figure 6 – 7D and 10A – 10E teaches price display unit upwardly directed rearward member joined to the a bottom of said forward panel), and

said rearward member removably receivable into said downwardly directed opening for removably attaching said price display unit to said bus (Figure 6 – 7D and 10A – 10E teaches the display unit can be attached and removed from the display bus).

Therefore, from this teaching of Munn, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Electronic display

panel attached to a panel bus of Massaro to include bus which has downward opening with cavity, display unit facing upward contact the forward bus panel, and display unit is removable from the bus as taught by Munn to conveniently present the price display panel to the customers.

Furthermore, all the claimed elements were known in the prior arts of Massaro and Munn, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As per Claim 6, Massaro teaches all the elements of the claimed invention but is silent regarding serrated surface on said bus and an engagement surface on said pricing unit to lock said price display unit against sliding movement along said bus.

Munn discloses bistable liquid crystal display having a remote display update control having serrated surface on said bus and an engagement surface on said pricing unit to lock said price display unit against sliding movement along said bus (Figure 10A – 10E).

Therefore, from this teaching of Munn, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Electronic display panel attached to a panel bus of Massaro to include serrated surface on said bus and an engagement surface on said pricing unit to lock said price display unit against sliding movement along said bus as taught by Munn firmly stabilize the panel on the bus.

Furthermore, all the claimed elements were known in the prior arts of Massaro and Munn, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As per Claim 10, Massaro teaches a tool having an end formed solely for engaging said price display unit and for releasing said rearward member from said bus wherein said price display unit cannot be removed from said bus without said tool (Figure 2) but is silent regarding said rearward member including a means for preventing the manual removal of said display unit from said bus.

Munn discloses bistable liquid crystal display having a remote display update control having said rearward member including a means for preventing the manual removal of said display unit from said bus (Figure 8 – 10E).

Therefore, from this teaching of Munn, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify electronic display for store shelves of Massaro to include manual prevention parts as taught by Munn to prevent unauthorized removal of the electronic display.

Furthermore, all the claimed elements were known in the prior arts of Massaro and Munn, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As per Claim 11, Massaro teaches all the elements of the claimed invention but is silent regarding wherein said tool has at least one elongate rod,

said price display unit has a hole therein sized to receive said at least one elongate rod

said hole positioned to direct said at least one elongate rod toward a portion of said rearward member wherein said at least one elongate rod will release said price display unit from said base.

Munn discloses bistable liquid crystal display having a remote display update control having wherein said tool has at least one elongate rod (Figure 8 – 10E),

said price display unit has a hole therein sized to receive said at least one elongate rod (Figure 8 – 10E), and

said hole positioned to direct said at least one elongate rod toward a portion of said rearward member wherein said at least one elongate rod will release said price display unit from said base (Figure 8 – 10E).

Therefore, from this teaching of Munn, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify electronic display for store shelves of Massaro to include manual prevention parts as taught by Munn to prevent unauthorized removal of the electronic display.

Furthermore, all the claimed elements were known in the prior arts of Massaro and Munn, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would

have yielded predictable results to one of ordinary skill in the art at the time of the invention.

4. Claims 2 – 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Massaro in view of Goodwin III (US 5473146).

As per Claim 2, Massaro teaches a device for electronically pricing a plurality of products on an elongate shelf wherein each of said products bears an electronically readable product identification number (Title, Abstract and Paragraph 13 teaches scanning Universal Product Code which is equivalent to electronically readable product identification number) comprising:

a bus having a plurality of contact strips (Abstract and Figure 1 and 2 teaches a bus including a rearward panel, a forward panel, a spacing between portions of said rearward and said forward panels forming a cavity therebetween and having a plurality of contact strips),

said bus attachable to said shelf (Abstract, Figure 1, Figure 6 and Figure 9 teaches bus are attached to the bus);

a plurality of price display units, each of said price display units for electronically displaying a product price (Abstract and Figure 6 teaches a price display unit for electronically displaying a product price), and

having contacts for making electric connection to said contact strips (Figure 1 and Figure 2, Figure 9 – 14 and Paragraph 50 – 51 teaches a display unit is attached to

the print circuit board which have direct electric connection to contact strips for power and data),

said price display units being removably attachable to said bus (Figure 1 and Figure 2 teach the display unit can be attached and removed from the display bus),

a control unit electrically connected to said contact strips (Figure 9, Abstract and Paragraph 27 - 28 and 32 teaches print circuit board and B.U.S.M stores display information such as price),

said control unit providing power and a display signal to each of said plurality of price display units attached to said bus (Abstract, Figure 9, and paragraph 27 – 28 and 61 – 62 teaches B.U.S.M and print circuit board is electronically connected on the bus and B.U.S.M send the display information to a display unit, which is attached to the print circuit board, through contact strip of the bus), and

However, Massaro is silent regarding each of said price display units bearing an electronically readable identification number thereon; a handheld wand for reading said product identification numbers for one of said products and one of said price display unit identification numbers and for transmitting said numbers to said control unit for connecting pricing information for said one of said products to said one of said price display units wherein pricing information for said one of said products is displayed on said one of said price display units.

Goodwin III discloses system and method for connecting product information with electronic shelf displays having each of said price display units bearing an electronically

readable identification number thereon (Column 3 line 8 - 11 teaches a electronic product identification number of the product are scanned using scanner), and

a handheld wand for reading said product identification numbers for one of said products and one of said price display unit identification numbers and for transmitting said numbers to said control unit for connecting pricing information for said one of said products to said one of said price display units wherein pricing information for said one of said products is displayed on said one of said price display units (Column 2 line 44 – Column 3 line 67 teaches matching product codes scanned from the merchandise with the identification number on the electronic panel display, and initiate the display by displaying item price, unit price, and etc. when the product code and the identification number matches. In order to match the product codes with identification number of a certain electronic panel display, the identification number needs to be input to the system along the product code to match. Therefore, the Examiner construes that the identification number of the certain electronic panel display is also scanned by the scanner, and the system is notified which panel is being compared with the product code).

Therefore, from this teaching of Goodwin III, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify electronic panel display on a bus of Massaro to include product identification number and handheld scanner to scan product code and the panel identification number as taught by Goodwin III to match the product code with the specific electronic display panel.

Furthermore, all the claimed elements were known in the prior arts of Massaro and Goodwin III, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As per Claim 3, Massaro teaches wherein said bus is attachable to a price track on a shelf (Figure 2, Figure 6 and Figure 7).

As per Claim 7, Massaro teaches wherein said control unit includes a receiver (Paragraph 7 – 8), and said device further comprising a control station remote from said bus and said control unit (Figure 8 and 9), and said control station including a transmitter wherein pricing information inserted into said control station is transmitted to said control unit and displayed on said plurality of price display units (Figure 8 and 9 and Paragraph 60).

5. Claims 5 and 8 - 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Massaro in view of Munn and in further view of Goodwin III.

As per Claims 5, 8 and 9, Massaro teaches said price display units having a receiver for receiving an electromagnetic communication (Paragraph 7 – 8),

However, Massaro and Munn's combination is silent regarding a product identification number printed in an electronically readable code on each of said plurality

of products on said shelf wherein said product identification number identifies said product; and a handheld programming unit including a transmitter and a scanner for reading said electronic codes wherein said scanner will read said product identification number for one of said products and said transmitter will transmit said product identification number for said one of said products to one of said price display units wherein said one of said price display units will portray pricing information for said one of said products.

Goodwin III discloses system and method for connecting product information with electronic shelf displays having

a product identification number printed in an electronically readable code on each of said plurality of products on said shelf wherein said product identification number identifies said product (Column 3 line 8 - 11 teaches a electronic product identification number of the product are scanned using scanner);

a handheld programming unit including a transmitter and a scanner for reading said electronic codes wherein said scanner will read said product identification number for one of said products and said transmitter will transmit said product identification number for said one of said products to one of said price display units wherein said one of said price display units will portray pricing information for said one of said products (Column 2 line 44 – Column 3 line 67 teaches matching product codes scanned from the merchandise with the identification number on the electronic panel display, and initiate the display by displaying item price, unit price, and etc. when the product code and the identification number matches. In order to match the product codes with

identification number of a certain electronic panel display, the identification number needs to be input to the system along the product code to match. Therefore, the Examiner construes that the identification number of the certain electronic panel display is also scanned by the scanner, and the system is notified which panel is being compared with the product code).

Therefore, from this teaching of Goodwin III, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify electronic panel display on a bus of Massaro and Munn's combination to include product identification number and handheld scanner to scan product code and the panel identification number as taught by Goodwin III to match the product code with the specific electronic display panel.

Furthermore, all the claimed elements were known in the prior arts of Massaro, Munn and Goodwin III, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

6. Claims 12 - 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Massaro in view of Goodwin III in view of Munn.

As per Claim 12, Massaro teaches a tool having an end formed solely for engaging said price display unit and for releasing said rearward member from said bus

wherein said price display unit cannot be removed from said bus without said tool (Figure 2) but is silent regarding said rearward member including a means for preventing the manual removal of said display unit from said bus.

Munn discloses bistable liquid crystal display having a remote display update control having said rearward member including a means for preventing the manual removal of said display unit from said bus (Figure 8 – 10E).

Therefore, from this teaching of Munn, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify electronic display for store shelves of Massaro and Goodwin III's combination to include manual prevention parts as taught by Munn to prevent unauthorized removal of the electronic display.

Furthermore, all the claimed elements were known in the prior arts of Massaro, Goodwin III and Munn, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As per Claim 13, Massaro and Goodwin III's combination teaches all the elements of the claimed invention but is silent regarding wherein said tool has at least one elongate rod,

said price display unit has a hole therein sized to receive said at least one elongate rod

said hole positioned to direct said at least one elongate rod toward a portion of said rearward member wherein said at least one elongate rod will release said price display unit from said base.

Munn discloses bistable liquid crystal display having a remote display update control having wherein said tool has at least one elongate rod (Figure 8 – 10E),

said price display unit has a hole therein sized to receive said at least one elongate rod (Figure 8 – 10E), and

said hole positioned to direct said at least one elongate rod toward a portion of said rearward member wherein said at least one elongate rod will release said price display unit from said base (Figure 8 – 10E).

Therefore, from this teaching of Munn, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify electronic display for store shelves of Massaro and Goodwin III's combination to include manual prevention parts as taught by Munn to prevent unauthorized removal of the electronic display.

Furthermore, all the claimed elements were known in the prior arts of Massaro, Goodwin III and Munn, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Response to Arguments

7. Applicant's arguments filed 20 November 2008 have been fully considered but they are not persuasive.
8. Applicant's arguments with respect to claims 1 – 2, 5 – 6, and 8 - 9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ig T. An whose telephone number is (571)270-5110.

The examiner can normally be reached on Monday - Thursday from 9:30 AM to 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Gart can be reached on 571-272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew S Gart/
Supervisory Patent Examiner, Art
Unit 3687

/lg T. An/
Examiner, Art Unit 3687